Amendments To The Claims

1. (Currently Amended) A water treatment apparatus comprising a treatment ~~housing~~ cartridge having an inlet for the water to be treated, an outlet for the treated water, a heater within the ~~housing~~ cartridge to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the ~~housing~~ cartridge with water up to a maximum level which leaves a headspace between the water and the roof of the ~~housing~~ cartridge, the entrance to the outlet being below the operating water level.

2. (Currently Amended) A water treatment apparatus ~~according to Claim 1, characterised in that the housing is in the form of~~ comprising a disposable treatment cartridge ~~which may be dispensed with including its heater~~ having an inlet for the water to be treated, an outlet for the treated water, a dispensable heater within the cartridge to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the cartridge with water up to a maximum level which leaves a headspace between the water and the roof of the cartridge, the entrance to the outlet being below the operating water level.

3. (Currently Amended) A water treatment apparatus ~~according to Claim 1, characterised in that~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, and the housing contains one or more perforated screens between the heater and the filter.

4. (Previously Amended) A water treatment apparatus according to Claim 3, characterised in that the housing is cylindrical, the heater is spaced above the base of the housing, the perforated screens are above the heater, the filter is above the screens and the outlet for treated water is above the filter.

5. (Previously Amended) A water treatment apparatus according to Claim 3, characterised in that at least one perforated screen has depending legs protruding downwardly from its underside.

6. (Currently Amended) A water treatment apparatus according to Claim 1, characterised in that the water to be treated first passes through a heat exchanger where it is warmed before it passes to the ~~housing~~ cartridge.

7. (Currently Amended) A water treatment apparatus according to Claim 6, characterised in that treated water leaving the ~~housing~~ cartridge is passed through the heat exchanger to warm the incoming untreated water.

8. (Currently Amended) A water treatment apparatus according to Claim 6, characterised in that the heat exchanger and the water treatment ~~housing~~ cartridge are contained within a single unit.

9. (Currently Amended) A water treatment apparatus ~~according to Claim 8, characterised in that~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, the water to be treated first passes through a heat exchanger where it is warmed before it passes to the housing, the heat exchanger and the water treatment housing are contained within a single unit, and the heat exchanger is positioned directly below the water treatment housing.

10. (Currently Amended) A water treatment apparatus ~~according to Claim 8, characterised in that~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, the water to be treated first passes through a heat exchanger where it is warmed before it passes to the housing, the heat exchanger and the water treatment housing are contained within a single unit, and the water treatment housing and the heat exchanger are housed side by side and one cover plate closes the upper ends of both.

11. (Previously Amended) A water treatment apparatus according to Claim 10, characterised in that the cover plate is a double-skinned plate formed by moulding in two parts which define internal galleries to provide the flow passages for the water.

12. (Previously Amended) A water treatment apparatus according to claim 1, characterised in that the heater has a wattage density of from 20 to 30 watts/cm^2.

13. (Currently Amended) A water treatment apparatus ~~according to claim 1, characterised in that it~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, and the apparatus includes means to vibrate the heater.

14. (Currently Amended) A water treatment apparatus according to claim 1, characterised in that it has a throughput of 12 to 18 litres of untreated water per hour into the ~~housing~~ cartridge and a heater of from 1000 to 1200 watts.

15. (Currently Amended) A water treatment apparatus according to claim 1 characterised in that a temperature probe is positioned in the ~~housing~~ cartridge to monitor the water temperature.

16. (Currently Amended) A water treatment apparatus according to claim 1, characterised in that the means to fill the ~~housing~~ cartridge with water up to a maximum level comprises a water depth probe.

17. (Currently Amended) A water treatment apparatus according to Claim 16, characterised in that two or more water depth probes are used to monitor water levels in the ~~housing~~ cartridge.

18. (Currently Amended) A water treatment apparatus according to Claim 15, characterised in that the probes are fitted within a separate chamber within the ~~housing~~ cartridge, which chamber only receives heated treated water after it has passed through the filter.

19. (Currently Amended) A water treatment apparatus according to claim 1, characterised in that one or more probes in the ~~housing~~ cartridge are used to measure water quality.

20. (Previously Amended) A water treatment apparatus according to claim 1, characterised in that the treated water is passed to a reservoir, the reservoir having an inlet and an outlet pipe, the entry to the outlet pipe within the reservoir being remote from the exit end of the inlet pipe.

21. (Previously Amended) A water treatment apparatus according to Claim 20, characterised in that automatic control means are provided to stop water flow through the apparatus when the reservoir is full.

22. (Previously Amended) A water treatment apparatus according to Claim 21, characterised in that the control means also control the heater to allow the heated water to be maintained at a lower temperature in standby mode when the water flow is stopped.

23. (Currently Amended) A water treatment apparatus ~~according to Claim 1, characterised in that it~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, and the apparatus is housed in a cabinet, the door of the cabinet being closed by a controlled bolt mechanism, the control means being programmed to release the bolt only when the water temperature in the housing has fallen to a predetermined level.

24. (Currently Amended) A water treatment apparatus ~~according to Claim 6, characterised in that it~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, the water to be treated first passes through a heat exchanger where it is warmed before it passes to the housing, and the apparatus includes means to allow a proportion of the untreated water leaving the heat exchanger outlet to be drawn off instead of passing to the treatment housing.

25. (Currently Amended) A water treatment apparatus ~~according to Claim 7, characterised in that~~ comprising a treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing to come into direct contact with the water, and a filter between the heater and the outlet, characterised in that means are provided to fill the housing with water up to a maximum level which leaves a headspace between the water and the roof of the housing, the entrance to the outlet being below the operating water level, the water to be treated first passes through a heat exchanger where it is warmed before it passes to the housing, treated water leaving the housing is passed through the heat exchanger to warm the incoming untreated water, and the heated water leaving the housing is passed through cooling means before passing back into the heat exchanger.

26. (Allowed) A water treatment apparatus comprising a treatment housing and a heat exchanger, the treatment housing having an inlet for the water to be treated, an outlet for the treated water, a heater within the housing and a filter between the heater and the outlet, characterised in that the inlet to the treatment housing receives water that has passed from a source of untreated water through the heat exchanger and the outlet from the treatment housing passes treated water back through the heat exchanger, and bypass valve means are provided to close the heat exchanger to incoming untreated water and to allow the incoming untreated water to flow directly into the treatment housing whereby the hot treated water passing through the heat exchanger sterilises the heat exchanger.

27. (Allowed) A water treatment apparatus according to Claim 26, characterised in that the bypass valve means is a first valve on the inlet pipe to the heat exchanger which is open during normal operation to allow inflow of untreated water and a bypass valve in a bypass pipe between the source of untreated water and the first valve, the bypass valve being closed during normal operation and the first valve being closed and the bypass valve opened to sterilise the heat exchanger.

28. (Allowed) A water treatment apparatus according to Claim 26, characterised in that the heater is in direct contact with the water in the housing.